

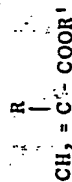
91-264063/36 A96 D22 F07 (A14) LIOY 06.07.90
 UNION CORP *JO 3174-417-A
 06.09.89-JP-231209 (+JP-178826) (29.07.91) C081-08/44
 C081-220/06

Water-soluble and salt-sensitive polymer - used in contact with body fluids and comprises (meth)acrylic acid and mixt. of vinyl monomer

C91-114706

4804 12/06 Qb.

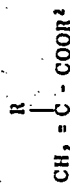
A water-soluble and salt-sensitive polymer comprises (A) 10-90 wt. % (meth)acrylic acid, (B) 90-10 wt. % vinyl monomer of formula:



R = H or methyl; and

R¹ = an aryl or cycloalkyl gp.

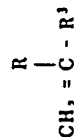
and at least 2 - 70 mol. % of which is present in the form of its salt or (C) comprising (C₁) 2 - 70 wt. % vinyl monomer and (C₂) 2 - 40 wt. % vinylic monomer of formula:



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A(4-Cl, 4-F, 4-F6E5, 9-A, 12-V3A) D(9-C2, 9-C3, 9-C4B) A 0598
 F(4-Cl, 4-E4)

R² = an alkyl, aryl or cycloalkyl gp.
 and (C₂) 2 - 40 wt. % of vinylic monomer of formula:



R³ = an aryl.

ADVANTAGE/USE

The polymer is soluble in fresh water but insoluble in water contg. at least 5 % neutral inorganic salt of a monovalent ion. It is formed into a film or a salt binder free from tackiness. It is used as parts in contact with body fluids (such as urine or blood) to prevent the spreading of body fluids. The spent polymer is discarded into a flush toilet. It is used as diapers, unwoven bandage or sanitary goods.

EMBODIMENT

(B) or (C₁) is pref. cyclohexyl (meth)acrylate or cyclopentyl (meth)acrylate.

JO3174417-A+

Documentation

Abstracts Profile 1991

(C₂) is pref. butyl-, 2-ethylhexyl-, phenyl-, benzyl-, phenoxyethyl-, cyclohexyl- or cyclohexyl (meth)acrylate. (C₁) is pref. styrene, alpha-methylstyrene or o-methylstyrene.

(A) or (C₁) is neutralised to an extent = 2 - 70 mol. % pref. by ethanolamine or a mixt. of ethanolamine and KOH or NaOH.

The polymer is prepd. pref. by soln. polyman. in a lower alcohol (e.g., methanol, ethanol or 2-propanol) or in an aq. alcohol contg. 10 - 70 % water or in an aq. ketone (e.g., acetone or MEK) in the presence of a 0.02 - 5 % polymerisation initiator (e.g., 2,2'-azobisisobutyronitrile, 2,2'-azobis(2-amidinopropane), 2 HCl, K peroxy sulphate, ammonium peroxy sulphate or H₂O₂) at 50 - 90°C. The polymer has an average mol.wt. = 10000 - 1500000. (8ppW59CGDwgNo0/0).

jp03174417/pn

L13 ANSWER 1 OF 1 WPINDEX COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER: 1991-264063 [36] WPINDEX

DOC. NO. CPI: C1991-114706

TITLE: Water-soluble and salt-sensitive polymer - used in contact with body fluids and comprises (meth)acrylic acid and mixt. of vinyl monomer.

DERWENT CLASS: A14 A96 D22 F07

INVENTOR(S): IIDA, Y; KOMATSU, M

PATENT ASSIGNEE(S): (LIOY) LION CORP

COUNTRY COUNT: 2

PATENT INFORMATION:

	PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
→	JP 03174417	A	19910729	(199136)*				<--
	US 5317063	A	19940531	(199421)#		7	C08F220-06	
	JP 3162696	B2	20010508	(200128)		9	C08F220-06	

APPLICATION DETAILS:

	PATENT NO	KIND	APPLICATION	DATE
→	JP 03174417	A	JP 1990-178826	19900706
	US 5317063	A	US 1991-656755	19910219
	JP 3162696	B2	JP 1990-178826	19900706

FILING DETAILS:

PATENT NO	KIND	PATENT NO
JP 3162696	B2 Previous Publ.	JP 03174417

PRIORITY APPLN. INFO: JP 1989-231209 19890906

JP 1990-178826 19900706

INT. PATENT CLASSIF.: C08F008-44; C08F220-06

MAIN: C08F220-06

SECONDARY: C08F008-44; C08F220-12; C08F220-18

BASIC ABSTRACT:

JP 03174417 A UPAB: 19930928

A water-soluble and salt-sensitive polymer comprises (A) 10-90 wt.% (meth)acrylic acid, (B) 90-10 wt.% vinyl monomer of formula.

CH₂=CR-COOR₁ (I).

Where R is H or methyl and R₁ is an aryl or cycloalkyl gp.

and at least 2-70 mol.% of which is present in the form of its salt or (C) (C1) 2-70 wt.% vinyl monomer and (C2) a 2-40 wt.% vinylic monomer of formula.

CH₂=CR-COOR₂ (II).

Where R₂ is e.g., an alkyl, aryl or cycloalkyl gp. and (C3) 2-40 wt.% of vinyl monomer of formula.

CH₂=CR-R₃ (III).

Where R₃ is an aryl.

USE/ADVANTAGE - The polymer is soluble in fresh water but insol. in water contg. at least 5% neutral inorganic salt of a monovalent ion. It is formed into film or a salt binder free from tackiness. It is used as parts in contact with body fluids (such as urine, blood, etc.) to prevent

spreading of body fluids. The spent polymer is discarded into a flush toilet. It is used in diapers, nonwoven bandage, sanitary goods, etc..
0/0

FILE SEGMENT: CPI

FIELD AVAILABILITY: AB

MANUAL CODES: CPI: A04-C01; A04-F04; A04-F06E5; A09-A; A12-V03A;
D09-C02; D09-C03; D09-C04B; F04-C01; F04-E04